## DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

#### OFFICE OF DESIGN POLICY & SUPPORT INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #0000543

**OFFICE** Design Policy & Support

STP00-0000-00(543)

**Brooks County** 

DATE August 9, 2010

SR 133 FM CR 276/Troupeville Rd. to CR

10/Pauline Church Rd.

for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED REVISED CONCEPT REPORT

Attached is the approved Revised Concept Report for the above subject project.

Attachment

#### DISTRIBUTION:

Genetha Rice-Singleton, Program Control Adminstrator

Ron Wishon, State Project Review Engineer

Glenn Bowman, State Environmental Administrator

Ken Thompson, Statewide Location Bureau Chief

Michael Henry, Systems & Classification Branch Chief

Kathy Zahul, State Traffic Engineer

Angela Alexander, State Transportation Planning Administrator

Paul Liles, State Bridge Engineer

Bobby Hilliard, State Program Delivery Engineer

Angela Robinson, Financial Management Administrator

Jeff Baker, State Utilities Engineer

Tim Warren, District Utilities Engineer - District 4 - Tifton

Brent Thomas, District Preconstruction Engineer - District 4 - Tifton

Joe W Sheffield, District Engineer - District 4 - Tifton

Douglas Fadool, Project Manager

BOARD MEMBER - 2<sup>nd</sup> Congressional District

### DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

### REVISED PROJECT CONCEPT REPORT

Project Number: STP00-0000-00(543)

County: Brooks
P. I. Number: 0000543
Federal Route Number: N/A
State Route Number: SR 133

The feature from the approved concept report being revised is the median type of the typical section.

Submitted for approval:		
DATE 4/15/10	Wolverton & Associates toc	
DATE 4/14/10	Office Head (Project Manager's Office)	_
DATE 4-14-10	Project Manager	_
Recommendation for approval:	. 1	
DATE 4/19/10	GLENN BOWMAN Le (recomm	rendation on file,
DATE	State Bridge Design Engineer (if applicable)	
	omitted for approval is consistent with that which is included and/or the State Transportation Improvement Program (State Transportation Planning Administrator	
•	U	

#### REVISED PROJECT CONCEPT REPORT Project Number: STP00-0000-00(543)

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#### **Need and Purpose:**

State Route 133 is a major north-south corridor in South Georgia and provides a vital connection between Valdosta on the south with Albany to the north. For its entire length between Valdosta and Albany, S.R. 133 is identified for eventual widening due to its inclusion on the Governor's Road Improvement Program (GRIP). The GRIP was initiated in the 1980's to address the importance of stimulating economic growth via an improved transportation network. S.R. 133 was recently added to the GRIP by the State Legislature and approved by the Governor.

Project P.I. 0000543 is not on a route designated in the GDOT Statewide Bicycle & Pedestrian Plan or a local bike plan. This project is one of 9 projects that will widen S.R. 133 between Albany and Valdosta. More specifically, there are 5 projects to widen S.R.133 between Valdosta and Moultrie and 4 projects between Moultrie and Albany. The proposed limits of the 5 projects (PI # 0000543, 0000544, 0000545, 0000546 and 431780) between Valdosta and Moultrie have logical termini; the southern terminus of these projects will tie into the existing four lane section of S.R. 133 near C.R. 276/Troupeville Road in Brooks County and the northern terminus of these projects will tie into the existing four lane section at the S.R. 35/East Moultrie Bypass in Colquitt County.

**Project Location:** Project STP00-0000-00(543) is a 6.67 mile section of S.R. 133 located in Brooks County. The project begins at C.R. 276/Troupville Road (Brooks County Mile Post 0.62) and extends to C.R. 10/Pauline Church Road (Brooks County Mile Post 7.29) where it ties to Project STP00-0000-00(544).

**Description of the approved concept:** Project P.I. 0000543 proposes a 4-lane section with a 20' raised concrete median from C.R. 276/Troupeville Road (where it ties into an existing 20' raised median typical section) to Ridgeland Road. At Ridgeland Road the rural shoulder transitions to an urban shoulder including curb and gutter and sidewalks, but maintains the same 20' raised concrete median. This urban 20' raised median roadway typical section is maintained through the densely populated area which ends at Fellowship Lane. The original concept also proposes a 44' depressed median section from Fellowship Lane to C.R. 10/Pauline Church Road. Improving S.R. 133 to a multi-lane facility with separate turning lanes will reduce turning conflicts from the through traffic and improve operations.

**PDP Classification:** Maior **Federal Oversight:** Full Oversight ( ), Exempt ( X ), State Funded ( ), or Other ( ) Functional Classification: Rural Minor Arterial **U.S. Route Number(s):** N/A State Route Number(s): SR 133 Traffic (AADT) as shown in the approved concept: Base Year: (2010) 10,140 Design Year: (2030) 14,990 **Updated traffic data (AADT):** Base Year: (2016) 8,550 Design Year: (2036) 12,700 **Approved Programmed/Schedule:** P.E: 2003 R/W: LR Construction: LR **VE Study Required:** Yes (X) No ( ) Note: A VE study was held in September 2006 and implemented in December 2006. Benefit/Cost Ratio: N/A

Yes ()

No(X)

Is the project located in an Ozone Non-attainment area?

#### REVISED PROJECT CONCEPT REPORT Project Number: STP00-0000-00(543)

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Is the project in a PM2.5 Non-Attainment area? Yes ( ) No ( X )

**Approved features to be revised:** A Value Engineering Study held in September 2006 and implemented in December 2006 recommended that the 20' raised concrete median section be revised to a five lane flush median section from Augusta Drive to Fellowship Lane. The roadway median typical section from Augusta Drive to Troupeville Road/C.R. 276 was revised to a 14' flush two-way center turn lane to minimize right-of-way and environmental impacts and reduce construction and right-of-way acquisition costs.

The outside urban shoulder width was reduced from 16' to 12' to minimize right-of-way and environmental impacts and reduce construction and right-of-way acquisition costs.

The 44' grassed median width from Fellowship Lane to C.R. 10/Pauline Church Road was reduced to 32' to minimize right-of-way and environmental impacts and reduce construction and right-of-way acquisition costs.

**Proposed features:** The 20' raised concrete median was revised to a 14' flush two-way center turn lane and the outside urban shoulder width was reduced from 16' to 12'. The 44' depressed median was revised to a 32' depressed median.

**Reason for Change:** The median type of the typical section was revised from a 20' raised concrete median to a to a five lane flush median section from Augusta Drive to Fellowship Lane due to the implementation of a VE recommendation. The five lane flush median section was extended from Augusta Drive to Troupeville Road/C.R. 276 to minimize right-of-way and environmental impacts and reduce construction and right-of-way acquisition costs.

Due to the more urbanized areas, the outside urban shoulder width was reduced to 12' to minimize right-of-way and environmental impacts and reduce construction and right-of-way acquisition costs.

The 44' depressed median was revised to a 32' depressed median to limit right-of-way impacts and minimize construction and right-of-way acquisition costs.

**Potential Environmental Impacts of Proposed Revision:** Environmental impacts were minimized by reducing the typical section footprint. The roadway median type of the typical section was revised from a 20' raised concrete median to a 14' flush two-way center turn lane with 12' outside shoulders, and the 44' depressed median was reduced to 32'.

Have Proposed Revisions Been Reviewed by Environmental Staff? (X) Yes () No

Environmental Responsibilities: Consultant, GDOT

#### **Updated cost estimates:**

- 1. Construction including Contingencies, Engineering and Inspection,
- 2. Right-of-Way
- 3. Utilities (reimbursable) and Utility Contingencies
- 4. Fuel Adjustment see attachment
- 5. Environmental Mitigation see attachment

**Recommendation:** It is recommended that the proposed revision to the concept report be approved for implementation.

REVISED PROJECT CONCEPT REPORT

Project Number: STP00-0000-00(543)

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#### **Attachments:**

- 1. Location Map
- 2. Cost Estimate
- 3. Utility Cost Estimate
- 4. Preliminary Right of Way Cost Estimate
- 5. Fuel Adjustment
- 6. Environmental Mitigation Cost Estimate
- 7. Typical sections
- 8. VE Implementation Letter
- 9. Approved Traffic Data

Concur:

Director of Engineering

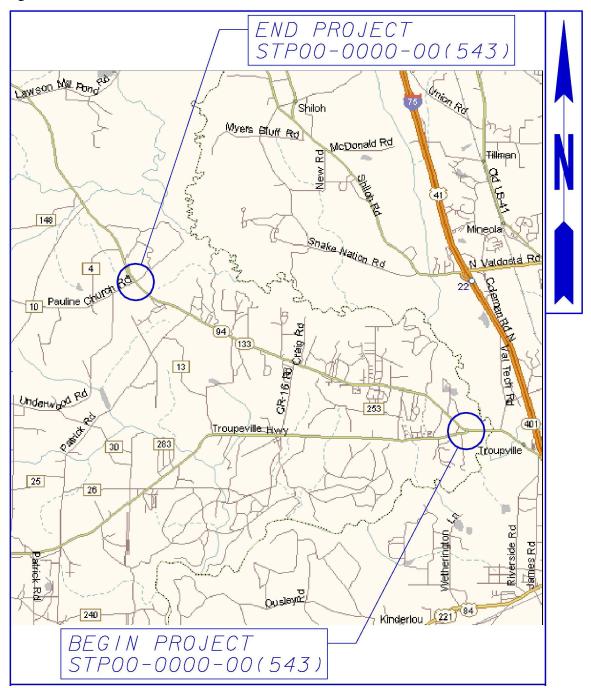
Approve:

Chief Engineer

31210

Date

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## **LOCATION MAP**

Project: STP00-0000-00(543) PI No.: 0000543

Description: Widening of SR 133 from Troupeville Road (CR 276)
to Pauline Church Road (CR10)

### **ATTACHMENT 2**

### **COST ESTIMATE**

#### **COST ESTIMATE SUMMARY**

STP00-0000-00(543)	
Base Construction Cost:	\$15,797,653
Engineering and Inspection @ 5%:	\$789,883
Construction Contingency @ 4%:	\$631,906
Fuel Adjustment:	\$1,861,267
Liquid AC Adjustment	\$2,924,142
Total Construction Cost:	\$22,004,851
Right of Way:	\$2,056,746
Reimbursable Utilities:	\$2,763,800
Mitigation Costs	\$192,338
Grand Total Project Cost:	\$27,017,735

### Estimate Report for file "STP00-0000-00(543) PI #0000543"

Item Number	Ouantity	Units	Unit Price	Item Description	Cost
205-0001	131770	CY	5.61	UNCLASS EXCAV	739229.70
206-0002	246180	CY	6.31	BORROW EXCAV, INCL MATL	1553395.79

Item Number	Quantity	Units	Unit Price	Item Description	Cost
550-1180	12000	LF	41.02	STORM DRAIN PIPE, 18 IN, H 1-10	492240.00
550-1240	2200	LF	51.4	STORM DRAIN PIPE, 24 IN, H 1-10	113080.0
550-1300	530	LF	68.89	STORM DRAIN PIPE, 30 IN, H 1-10	36511.7
550-1480	150	LF	126.41	STORM DRAIN PIPE, 48 IN, H 1-10	18961.5
550-2180	4660	LF	28.99	SIDE DRAIN PIPE, 18 IN, H 1-10	135093.4
550-3418	75	EA	626.89	SAFETY END SECTION 18 IN, SIDE DRAIN, 4:1 SLOPE	47016.75
550-3618	75	EA	638.03	SAFETY END SECTION 18 IN, SIDE DRAIN, 6:1 SLOPE	47852.25
550-4218	30	EA	666.24	FLARED END SECTION 18 IN, STORM DRAIN	19987.2
550-4224	22	EA	786.33	FLARED END SECTION 24 IN, STORM DRAIN	17299.26
550-4230	6	EA	943.99	FLARED END SECTION 30 IN, STORM DRAIN	5663.94
550-4248	2	EA	2200.0	FLARED END SECTION 48 IN, STORM DRAIN	4400.0
668-1100	64	EA	2277.92	CATCH BASIN, GP 1	145786.88
668-2100	37	EA	4470.97	DROP INLET, GP 1	165425.89
668-4300	2	EA	2586.45	STORM SEWER MANHOLE, TP 1	5172.9

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	33	AC	571.97	TEMPORARY GRASSING	18875.01
163-0240	1440	TN	183.84	MULCH	264729.6
163-0300	6	EA	2872.37	CONSTRUCTION EXIT	17234.22
163-0503	13	EA	549.25	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	7140.25
163-0522	196	EA	88.74	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS - TYPE A SILT FENCE	17393.03
163-0530	2500	LF	4.28	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	10700.0
163-0531	9	EA	8070.58	CONSTRUCT AND REMOVE SEDIMENT BASIN, TP 1, STA NO -	72635.22
163-0550	130	EA	308.76	CONSTRUCT AND REMOVE INLET SEDIMENT	40138.79
165-0010	2000	LF	0.93	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	1860.0
165-0030	16400	LF	1.83	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	30012.0
165-0040	196	EA	79.16	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	15515.35
165-0060	20	EA	1213.72	MAINTENANCE OF TEMPORARY SEDIMENT BASIN, STA NO -	24274.4
165-0070	1250	LF	1.8	MAINTENANCE OF BALED STRAW EROSION CHECK	2250.0
165-0087	13	EA	178.48	MAINTENANCE OF SILT CONTROL GATE, TP	2320.24
165-0101	6	EA	660.01	MAINTENANCE OF CONSTRUCTION EXIT	3960.06
165-0105	130	EA	110.84	MAINTENANCE OF INLET SEDIMENT TRAP	14409.2
167-1000	2	EA	1349.35	WATER QUALITY MONITORING AND SAMPLING	2698.7
167-1500	24	МО	1035.76	WATER QUALITY INSPECTIONS	24858.23
171-0010	4000	LF	1.8	TEMPORARY SILT FENCE, TYPE A	7200.0
171-0030	32800	LF	3.84	TEMPORARY SILT FENCE, TYPE C	125952.0
643-8200	1000	LF	3.13	BARRIER FENCE (ORANGE), 4 FT	3130.0
				Section Sub Total:	\$707,286.

Detail Estimate: Cost Estimate Report

Item Number	Quantity	Units	<b>Unit Price</b>	Item Description	Cost
603-2024	170	5Y	53.99	STN DUMPED RIP RAP, TP 1, 24 IN	9178.30
603-7000	170	SY	5.12	PLASTIC FILTER FABRIC	870.4
700-6910	65	AC	906.91	PERMANENT GRASSING	58949.15
700-7000	130	TN	58.05	AGRICULTURAL LIME	7546.5
700-7010	163	GL.	19.3	LIQUID LIME	3145.9
700-8000	66	TN	348.14	FERTILIZER MIXED GRADE	22977.23
700-8100	3300	LB	2.04	FERTILIZER NITROGEN CONTENT	6732.0
710-9000	9000	SY	3.65	PERMANENT SOIL REINFORCING MAT	32850.0
715-2100	0	SY	2.5	BITUMINOUS TREATED ROVING, SLOPES	0.0
716-2000	200	SY	1.15	EROSION CONTROL MATS, SLOPES	229.99
				Section Sub Total:	\$142,479.49

tem Number	Quantity	Units	Unit Price	Item Description	Cost
212-1000	5000	CY	14.25	GRANULAR EMBANKMENT, INCL MATL & HAUL	71250.0
310-1101	131700	TN	17.17	GR AGGR BASE CRS, INCL MATL	2261289.0
318-3000	16500	TN	17.21	AGGR SURF CRS	283965.0
402-1812	5120	TN	58.91	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	301619.19
402-3121	29990	TN	61.84	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	1854581.6
402-3130	23580	TN	58.94	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	1389805.2
402-3190	37810	TN	63.63	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2,INCL BITUM MATL & H LIME	2405850.30
413-1000	25090	GL	1.84	BITUM TACK COAT	46165.6
441-0016	9790	SY	39.86	DRIVEWAY CONCRETE, 6 IN TK	390229.4
441-0104	10070	SY	33.95	CONC SIDEWALK, 4 IN	341876.5
441-0106	0	SY	41.72	CONC SIDEWALK, 6 IN	0.0
441-0748	210	SY	29.05	CONCRETE MEDIAN, 6 IN	6100.5
441-4020	830	SY	41.3	CONC VALLEY GUTTER, 6 IN	34279.0
444-1000	200	LF	3.91	SAWED JOINTS IN EXIST PAVEMENTS - PCC	782.0
446-1100	43005	LF	2.79	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH	119983.95
456-2012	9	GLM	1125.15	INDENTATION RUMBLE STRIPS - GROUND- IN-PLACE (CONTINUOUS)	10126.35

Item Number	Quantity	Units	Unit Price	Item Description	Cost
632-0003	2	EA	15311.11	CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3	30622.22
636-1020	1700	SF	14.83	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	25211.0
636-2010	210	LF	7.19	GALV STEEL POSTS, TYP1	1509.9
636-2070	2600	LF	8.75	GALV STEEL POSTS, TP 7	22750.0
636-5100	14	EA	177.13	MILEPOST SIGNS	2479.81
				Section Sub Total:	\$82,572.94

Item Number	Quantity	Units	<b>Unit Price</b>	Item Description	Cost
653-0120	300	EA	73.82	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	22145.99
653-0170	50	EA	85.04	THERMOPLASTIC PVMT MARKING, ARROW, TP 7	4252.0
653-1704	1000	LF	5.02	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	5020.0
653-1804	9000	LF	2.13	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	19170.0
653-2501	16	LM	1354.1	THERMOPLASTIC SOLID TRAF STRIPE, S IN, WHITE	21665.6
653-2502	15	LM	1377.67	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	20665.05

4/8/2010 Detail Estimate: Cost Estimate Report

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	653-4501	14	GLM	892.14	THERMOPLASTIC SKÎP TRAF STRIPE, 5 IN, WHITE	12489.96
	653-4502	6	GLM	785.82	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	4714.92
ľ	653-6004	7000	SY	2.79	THERMOPLASTIC TRAF STRIPING, WHITE	19530.0
Ī	653-6006	400	SY	3.21	THERMOPLASTIC TRAF STRIPING, YELLOW	1284.0
Ī	654-1001	500	EA	3.1	RAISED PVMT MARKERS TP 1	1550.0
ľ	654-1003	500	EA	3.76	RAISED PVMT MARKERS TP 3	1880.0
	***************************************				Section Sub Total:	\$134,367.53

Item Number   (	Quantity	Units	Unit Price	Item Description	Cost
620-0100	2400	LF	30.45	TEMPORARY BARRIER, METHOD NO. 1	73080.0
634-1200	200	EA	102.52	RIGHT OF WAY MARKERS	20504.0

Item Number	Quantity	Units	<b>Unit Price</b>	Item Description	Cost
150-1000	1	LS	900000.0	TRAFFIC CONTROL -	900000.0
153-1300	1	EA	72342.67	FIELD ENGINEERS OFFICE TP 3	72342.67
201-1500	1.	l Ls i	600000.0	CLEARING & GRUBBING -	600000.0

Total Estimated Cost: \$15,797,653.74

# ATTACHMENT 3 UTILITY COST ESTIMATE

### DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

### INTERDEPARTMENT CORRESPONDENCE

FILE

Project No:

STP00-0000-00(543)

County

BROOKS

P.L. #

0000543

Description:

SR 133 FM CR 276/TROUPEVILLE RD TO CR 10/PAULINE CHURCH RD

OFFICE: Tifton

DATE: December 3, 2009

NOW

FROM

Tim Warren, P.E., District Utilities Engineer

TO

Douglas Fadool, Project Manager

#### SUBJECT

#### UTILITY COST ESTIMATE

A review of utilities located on the above referenced project has been conducted based on the latest available plans.. Listed below is a breakdown of the anticipated reimbursable and non-reimbursable cost.

Utility Owner	Reimbursable	Non- Reimbursable	Estimate Based on
At&T / Bellsouth	\$1,500,000.00	\$607,818.00	Site Visit / Available Drawings
Colquitt Eme	\$303,750.00	\$202,500.00	Site Visit / Available Drawings
Georgia Transmission Corp.	\$0.00	\$250,000.00	Site Visit / Available Drawings
Mediacom	\$0.00	\$292,500.00	Site Visit / Available Drawings
WATER SERVICE COMPANY OF GEORGIA - MATT DOZIER- PRIVATE WATER	\$0.00	\$43,600.00	Site Visit / Available Drawings
Total	\$1,803,750.00	\$1,396,418.00	

30% Utility Contingency for relocation cost

\$960,050.00

#### \*\* Indicates Potential Utility Aid Request from Local Gov't

If additional information is needed, please contact me or Bill Cooper, Assistant District Utilities Engineer at (229) 386-3288.

TW:BC:KC:ec

G.: Jeff Baker, P.E., State Utilities Engineer
 Brent Thomas, District Preconstruction Engineer
 Angela Whitworth, State Financial Management Administrator

# ATTACHMENT 4 PRELIMINARY RIGHT OF WAY COST ESTIMATE

#### PRELIMINARY RIGHT OF WAY COST ESTIMATE

3/18/2010 Date: Project: SR 133 Widening Project No: STP00-0000-00(543) 0000543 P.I. Number Existing/Required R/ Varies 128 No. Parcels **Project Termini:** CR 276/Troupville Rd. to CR 10/Pauline Church Rd. Project Description: SR 133 Widening from CR 276/Troupville Rd. to CR 10/Pauline Church Rd. Land: \$100,000.00 /AC \$48,000.00 0.48 acres @ Commercial Land **@** \$0.00 /AC \$ Unknown Easements 0 acres \$485,500.00 48.55 acres @ \$10,000.00 /AC \$ Residential Land \$0.00 /AC \$ Unknown 0 acres @ Easements \$0.00 /AC \$ Unknown O acres @ Special Use Land \$0.00 /AC \$ Unknown 0 acres @ Easements \$533,500.00 **TOTAL** \$ Improvements: Unknown Relocations: There are no commercial relocations within the project limits. \$ 0.00 \$ 295,833.00 Residential \$ 0.00 Possible Misc. Moves 295,833.00 TOTAL Damages: \$ Proximity Unknown \$ Consequential Unknown Cost to Cure Unknown \$ 0.00 TOTAL **SUB-TOTAL:** Net Cost 829,333.00 **Scheduling Contingency** 55% \$ 456,133.15 Adm/Court Cost 60% 771,279.69 **TOTAL COST** \$2,056,745.84

Prepared By:

Mario V. Macrina, P.E. Wolverton & Associates, Inc. Reviewed/Approved

Howard P. Copeland R/W Administrator

Note: Accuracy of estimate is the sole responsibility of the preparer

Note: The Market Appreciation (40%) is not included in this Preliminary Cost Estimate

# ATTACHMENT 5 FUEL ADJUSTMENT

Date 7/15/2010

P.I. Number **0000543** 

County

**Brooks** 

Project Number **STP00-0000-00(543)** 

Special Provision, Section 109-Measurement and Payment

### FUEL PRICE ADJUSTMENT (ENGLISH 125% MAX)

ENTER FPL DIESEL	2.814
ENTER FPM DIESEL	6.332

ENTER FPL UNLEADED	2.647
ENTER FPM UNLEADED	5.95575

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

INCREASE ADJUSTME	NT
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125.00%

#### **INCREASE ADJUSTMENT**

125.00%

ROADWAY ITE	MS	QUAN	ITITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as spe Sections 205 (CUBIC	YARD)	1	31770.000	0.29	38213.30	0.15	19765.50	
Excavations paid as spe Sections 206 (CUBIC		246180.000		0.29	71392.20	0.15	36927.00	
GAB paid as specified by th Section 310 <b>(TOI</b>		1	31700.000	0.29	38193.00	0.24	31608.00	
Hot Mix Asphalt paid as spe ton under Sections 400				2.90		0.71		
Hot Mix Asphalt paid as spe ton under Sections 402			96500.000	2.90	279850.00	0.71	68515.00	
PCC Pavement paid as spec square yard under Section				0.25		0.20		
BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211				8.00		1.50		
ClassConcrete (CY) Section 500				8.00		1.50		Class A Ret Wall
ClassConcrete (CY) Section 500				8.00		1.50		
ClassConcrete (CY) Section 500				8.00		1.50		
Superstru Con Class(CY)				0.00		4.50		
Section 500  Superstru Con Class(CY)  Section 500				8.00		1.50		
Superstru Con Class(CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500				8.00		1.50		
					1 of 4	30		
BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Page 1	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS

L	INLEADED PRICE ADJ		\$477,354.22		
	DIESEL PRICE ADJUS		\$1,383,913.3		
	SUM QF DIESEL=	427648.50	SUM QF UNLEADED=	156815.50	
Pile Encasement,(LF) Section 547		8.00	1.50		
Pile Encasement,(LF) Section 547		8.00	1.50		
Section 524		8.00	1.50		
Drilled Caisson, (LF) Section 524  Drilled Caisson, (LF)		8.00	1.50		
Drilled Caisson, (LF) Section 524		8.00	1.50		
Pilinginch (LF) Section 520		8.00	1.50		
Pilinginch (LF) Section 520		8.00	1.50		
Pilinginch (LF) Section 520		8.00	1.50		
Pilinginch (LF) Section 520		8.00	1.50		
Pilinginch (LF) Section 520		8.00	1.50		
Pilinginch (LF) Section 520		8.00	1.50		
ar Reinf Steel (LB) Section 511		8.00	1.50		
Section 511		8.00	1.50		
Section 511 Stru Reinf Plan Quantity(LB) Section 511		8.00	1.50		
Stru Reinf <u>Plan Quantity(</u> LB)			1.50		
PSC Beams (LF) Section 507		8.00	1.50		
PSC Beams (LF) Section 507		8.00	1.50		
PSC Beams (LF) Section 507		8.00	1.50		
Section 501		8.00	1.50		
Section 501 tru Steel <u>Plan Quantity</u> (LB)		8.00	1.50		

#### ASPHALT CEMENT PRICE ADJUSTMENT

(BITUMINOUS TACK COAT 125% MAX)

**REMARKS** 

APPLICABLE TO CONTRACTS/PROJECTS CONTAINING THE 413 SPECIFICATION, SECTION 413.5.01 ADJUSTMENTS
ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

ENTER APL 494 ENTER APM 1111.5

125.00% INCREASE ADJUSTMENT

 L.I.N.
 TYPE
 TACK (GALLONS)
 TACK (TONS)

 413-1000
 25090
 107.7641

TMT = 107.7641

PRICE ADJUSTMENT(\$) \$63,882.53

#### 400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX

 ENTER APL
 494
 ENTER APM
 1111.5

http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx

125.00% INCREASE ADJUSTMENT

L.I.N. / Spec Number	MIX TYPE	НМА	JMF AC%	AC	REMARKS
402-1812		5120.000	5.00	256.00	Leveling
402-3121	25 mm SP	29990	5.00	1499.50	
402-3130	12.5 mm SP	23580	5.00	1179.00	
402-3190	19 mm SP	37810	5.00	1890.50	
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			5.00		
			TMT =	4825.00	

PRICE ADJUSTMENT(\$) \$2,860,260.00

## ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

**BITUMINOUS TACK COAT(Surface Treatment 125% MAX)** APPLICABLE TO CONTRACTS CONTAINING THE 413 SPEC. SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx ENTER APM 1111.5 **ENTER APL** 494 125.00% **INCREASE ADJUSTMENT Use this side for Asphalt Cement Only Use this side for Asphalt Emulsion Only ASPHALT EMULSION TYPE TYPE** L.I.N. L.I.N. **TACK** (GALLONS) (GALLONS) TMT =TMT =**REMARKS:** REMARKS: **MONTHLY PRICE ADJUSTMENT(\$)** 

	ADJUSTMENT S	<u>UMMARY</u>	
	FUEL PRICE ADJUSTMENT (ENGLISH 125% MAX)		
	DIESEL PRICE ADJUSTMENT(\$)	<u>\$1,383,913.</u>	<u>31</u>
	UNLEADED PRICE ADJUSTMENT(\$)	<u>\$477,354.2</u>	<u>2</u>
	ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOU MAX)	IS TACK COAT 125% \$63,882.53	3
	400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125	5% MAX \$2,860,260.	<u>00</u>
	ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMI COAT(Surface Treatment 125% MAX)	NOUS TACK	
REMARKS:			
	TOTAL ADJUSTMENTS	\$4,785,410.07	

DWM 10/08

# ATTACHMENT 6 ENVIRONMENTAL MITIGATION COST ESTIMATE

### PRELIMINARY MITIGATION COST ESTIMATE

Date:

4/6/2010

Project:

SR 133 Widening

Project No:

STP00-0000-00(543)

P.I. Number

0000543

Project Termini:

CR 276/Troupville Rd. to CR 10/Pauline Church Rd.

**Project Description:** 

STP00-0000-00(543)

SR 133 Widening from CR 276/Troupville Rd. to CR 10/Pauline Church Rd.

Mitigation Cost; assuming that a Wetland Credit cost of \$7,000 per credit and a Stream Credit cost \$100 per credit

Project No.

**Required Stream Credits** 

**Cost of Credit** 

\$170,253.00

**Total Stream Credits** 

3783.40 3783.40

Sub-Total \$170,

\$45.00

\$170,253.00

Project No.

**Required Wetland Credits** 

**Cost of Credit** 

STP00-0000-00(543)

6.31

\$3,500.00

\$22,085.00

**Total Wetland Credits** 

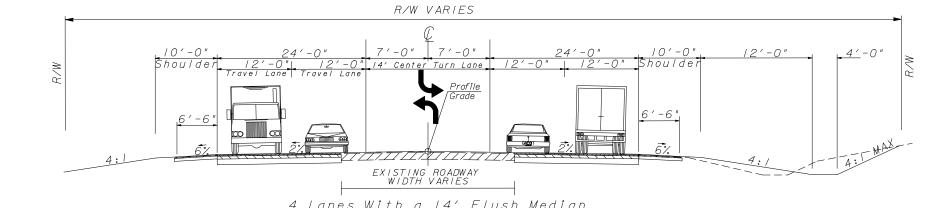
6.31 Sub-Total

\$22,085.00

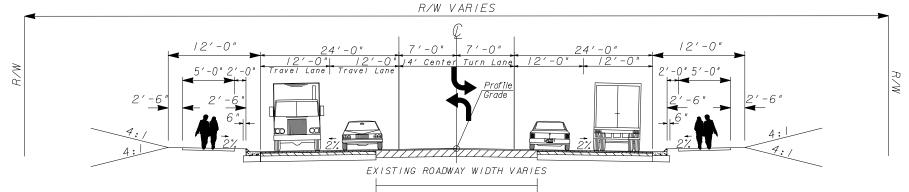
Total

\$192,338.00

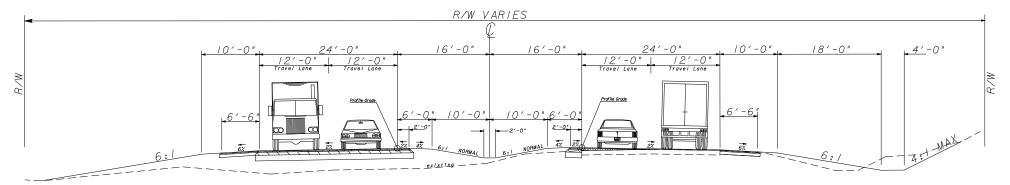
## ATTACHMENT 7 TYPICAL SECTIONS



4 Lanes With a 14' Flush Median Troupeville Road/C.R. 276 to Ridgeland Road



4 Lanes With a 14' Flush Median and Sidewalk Ridgeland Road to Fellowship Lane



4 Lanes With a 32' Median Fellowship Lane to Pauline Church Road/C.R. 10

## ATTACHMENT 8 VALUE ENGINEERING IMPLEMENTATION LETTER

## DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

#### INTERDEPARTMENT CORRESPONDENCE

FILE:

STP-0000-00(543), (544), (545), & (546) OFFICE: Engineering Services

STP-032-2(28) Brooks/Colquitt

P.I. Nos. 0000543, 0000544, 0000545, 0000546, & 431780

S.R. 133 Widening/Reconstruction

DATE:

December 20, 2006

FROM:

Brian K. Summers, PE, State Project Review Engineer

TO:

Babs Abubakari, PE, State Consultant Design and Program Delivery Engineer

SUBJECT:

IMPLEMENTATION OF VALUE ENGINEERING STUDY

**ALTERNATIVES** 

Recommendations for implementation of Value Engineering Study Alternatives are indicated in the table below. Incorporate the VE alternatives recommended for implementation to the extent reasonable in the design of the project.

ALT#	Description	Potential Savings/LCC	Implement	Comments
		STP-0000-0	0(543)	
543-1	Construct only the first 3.7 miles through Troupville	\$8,272,625	No	Does not satisfy the Need and Purpose of the project.
543- 3/4/5	Selectively eliminate median openings, left turn lanes and U-turn bump outs	\$96,479	Yes	This will be done.
543-6	Eliminate sidewalks (concrete only)	\$671,246	No	Does not satisfy curren GDOT Policy.
543-7	Use a grass median in lieu of a concrete median	\$1,060,722	No	This project does not have many sections where the median width is consistently over 8 fee which is when grass medians could be used.
543-8	Minimize the extent of side road improvements	Design Suggestion	Yes	This will be done.
543-9	Use a five-lane section through Troupville from Augusta Drive to Fellowship Home Lane	\$1,652,706	Yes	The traffic on this corridor warrants a five lane section per current GDOT Policy.

# STP-0000-00(543), (544), (545), & (546) & STP-032-2(28) Brooks/Colquitt Implementation of Value Engineering Study Alternatives Page 2.

ALT#	Description	Potential Savings/LCC	Implement	Comments
		STP-0000-0	0(544)	
544-1	Construct only 1.45 miles of S.R. 133 from Lawson Pond Road to Old Quitman Road through the town of Morven	\$11,551,485	No	Does not satisfy the Need and Purpose of the project.
544- 3/4/5	Selectively eliminate median openings, left turn lanes and U-turn bump outs	\$48,080	Yes	This will be done.
544-7	Use a five-lane section through Morven from Old Quitman Road to Lawson Pond Road	\$900,062	Yes	The traffic on this corrido warrants a five lane section per current GDOT Policy.
544-8	Cul-de-sac Hitch Road and eliminate intersection with S.R. 133	-\$26,648 (Cost Increase)	Yes	This will be done.
544-9	Use arch span structures in lieu of box culverts	\$210,021	Yes	This should be considered depending on survey of existing geotechnical conditions and costs.
544-10	Complete mainline railroad crossing prior to closing other city railroad crossings	Design Suggestion	Yes	This will be done.
		STP-0000-0	0(545)	
545-1	Improve only two intersections: S.R. 133 @ S.R. 333 and S.R. 133 @ S.R. 26	\$32,898,183	No	Does not satisfy the Nee and Purpose of the project.
545- 2/3/4	Selectively eliminate median openings, left turn lanes and U-turn bump outs	Proposed \$310,031 Actual \$155,016	Yes	The median opening 1,45 feet north of Rock Hill Roa can not be eliminated. The other one can be eliminated.
545-6	Use arch span structures in lieu of multi-cell box culverts	\$37,797	Yes	This should be considered depending on survey of existing geotechnical conditions and costs.
545-7	Use a 32 foot median section in lieu of a 44 foot median section to minimize wetland impacts near Berlin	\$40,623	No	Does not satisfy "GOD Policy Regarding Media Width Reduction for Minimization of Impacts Wetlands" dated 2/5/98.
545-8	Use a grass median in lieu of a concrete median	\$1,557,131	Yes	This will be done.

## STP-0000-00(543), (544), (545), & (546) & STP-032-2(28) Brooks/Colquitt Implementation of Value Engineering Study Alternatives Page 3.

ALT#	Description	Potential Savings/LCC	Implement	Comments
		STP-0000-0	0(546)	
546-1	Construct S.R. 133 through Berlin and the Eastern portion of Moultrie only	\$23,499,437	No	Does not satisfy the Need and Purpose of the project.
546- 2/3/4	Selectively eliminate median openings, left turn lanes and U-turn bump outs	Proposed -\$32,301 (Cost Increase) Actual \$139,585	Yes	Actual cost savings are based on using a grass median in lieu of a concrete median. Four of the five median openings will be eliminated. The median opening at Sta. 360+00 can not be eliminated.
546-5	Eliminate sidewalks (concrete only)	\$169,915	No	Does not satisfy current GDOT Policy.
546-6	Use a grass median in lieu of concrete median	\$4,503,449	Yes	This will be done.
546-8	Use a five-lane section through the City of Berlin and Eastern Moultrie	\$82,258	Yes	This will be done.
546-9	Use arch span structures in lieu of multi-cell box culverts	-\$235,910 (Cost Increase)	No	Cost increase does not appear to justify using arch span structures.
546-10	Signalize South Vanderberg Drive entrance to airport (Spence Field)	-\$200,565 (Cost Increase)	No	Does not appear to meet Traffic Signal warrants.
		STP-032-2	2(28)	
28-2/3	Selectively eliminate median openings, left turn lanes and U-turn bump outs	-\$2,426 (Cost Increase)	Yes	This will be done.
28-4	Eliminate sidewalks (concrete only)	\$1,114,135	No	Does not satisfy current GDOT Policy.
28-5	Use a grass median in lieu of concrete median	\$1,410,923	No	This project does not have many sections where the median width is consistently over 8 feet which is when grass medians could be used.
28-7	Use a five-lane section through East Moultrie from South Vanderberg Drive to the East Moultrie Bypass (S.R. 35)	\$954,136	Yes	This will be done.

### STP-0000-00(543), (544), (545), & (546) & STP-032-2(28) Brooks/Colquitt Implementation of Value Engineering Study Alternatives Page 4.

ALT#	Description	Potential Savings/LCC	Implement	Comments
	S	ГР-032-2(28) -	continued	
28-8	Provide new intersection at Quail Run and Sanderson Farms Chicken Plant and eliminate Old Moultrie-Adel Road/S.R. 133 intersection	-\$464,032 (Cost Increase)	No	This work will be done under another separate project.

A meeting was held on December 20, 2006 to discuss the above recommendations. David Norwood of Consultant Design and Ron Wishon, Lisa Myers and Brian Summers of Engineering Services were in attendance.

The results above reflect the consensus of those in attendance and those who provided input.

Approved:

Date: 12/20/06

David E. Studstill, Jr., P. E., Chief Engineer

BKS/REW Attachments

Gus Shanine C: James Magnus

David Norwood

Karyn Matthews

Jack Muirhead

Alexis John

Nabil Raad

Lisa Myers

## ATTACHMENT 9 APPROVED TRAFFIC DATA

## Department of Transportation State of Georgia

#### INTERDEPARTMENT CORRESPONDENCE

FILE

STP00-0000-00(543), Brooke County

**OFFICE** Planning

P.I. # 0000543

DATE December 14, 2009

FROM

Angela T. Alexander, State Transp. Planning Administrator

TO

Bobby Hilliard, P.E., State Program Delivery and Consultant Design

Engineer

**Attention:** Douglas Fadool

**SUBJECT** 

Reviewed Design Traffic for S.R. 133 from C.R. 276/Troupeville Rd to C.R.

10/Pauline Church Rd.

As per your request, we reviewed the consultant's Design Traffic for the

above project.

The Design Traffic is approved. If you have any questions concerning this

information please contact Abby Ebodaghe at (404) 631-1923.

ATA/AFE

